BDD is a software development process that evolved from TDD. It emphasizes collaboration between developers, tester and business stakeholders to creat an Application.

Methodology using Behaviour Driven Development (BDD).

1. User Story:

Format- User story are written in format as the user explain the about the application.

Purpose- User describe all the requirement feature in the application.

Example: User want to develop the chat application so he say that he want to be able to interact with other users through a chat application, So that he can send the message and receive the message.

1. Scenario:

Sending message-

 Logged in to chat application

Choose a user to chat with like WhatsApp

Convey message like “Hello”

Send the message

Receiving Message-

Logged in the chat application

 Receive a message from user

 See the message

Read the message

 Send the replay if it required.

Methodology using Test Driven Development:

1. Write a Test:

Goal- Write a test case for a new function of feature.

Output- A test case specifies the desired functionality.

Guideline-The test should be simple, specific, and focused on one aspect of the functionality. Initially, the test will fail because the functionality in not yes implemented.

def test\_send\_message();

chat=ChatApplication()

sender= User

receiver= User

message= “Hello”

chat.send\_message(sender, receive, message)

1. Run the Test:

The test fails because the add function not exist.

1. Write the code:

Function sendMessage(sender, receiver, message);

Add message to receiver inbox

or

class ChatApplication:

def send\_message(sender, receiver, message);

receiver.receive\_message(“Hello”)

classs user

def init(name);

name=vivek

message=Hello

def receive\_message= (Hello)

message.append(Hello)

1. Run All Test:

The Test passes.

1. Refactor the code:

Goal- Enhance code quality

Output-Cleaner, More systematic code

Guideline-Enhance readability, Remove redundancy.

1. Repeat:

Write additional tests for new feature and repeat the cycle

Methodology For Feature Driven Development:-

1. Domain Object Modelling:

* Creat a Chat application representing key entities as Sender, Receiver and Messages.
* User
* Message
* Group chat

1. Feature List:

* User Authentication
* Sending Message
* Receiver Message
* Group Chat

1. Plan by Feature:

Start with basics features like user authentication, sending and receiving messages.

Progress to more advance feature like Multimedia support, Emoji etc.

1. Design by Feature: (Design each feature focusing on its specific requirement and user interface and Define interface, data structure and integration.)

Design the interface for composing and sending messages.

Define the message formant and data structure for storing message.

1. Build by Feature:

Implement user registration and login function.

Integrate user authentication with other feature like sending and receiving message.